FILE

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
Division of Forest Insect Investigations

FOREST INSECT CONDITIONS

BALL MOUNTAIN BLOWDOWN AREA
GOOSENEST DISTRICT, SHASTA NATIONAL FOREST

Reconnaissance Survey

On July 29 R. C. Hall of the Forest Insect Laboratory, W. C. Branch of the Forest Service Regional Office, Vance Brown from the Supervisor's Office of the Shasta National Forest, and Ranger C. A. Abell from the Goosenest District made an inspection of insect damage in windthrown white and red fir near Ball Mountain on the Goosenest District of the Shasta National Forest. This survey was undertaken in response to a request from the Shasta Forest for an appraisal of damage from wood borers in windthrown material being salvaged by the Associated Lumber and Box Company of Dorris, California. This inspection covered both the woods and mill operation. The problem of borer larvae in lumber was discussed with Mr. George Doran, General Manager of the Associated Lumber and Box Company.

Status

During the winter of 1951-52 a heavy windstorm blew down an estimated 14 million board feet of white and red fir on several sections of a recent cutover area on the north slope of Ball Mountain. Salvage operations, by the Associated Lumber and Box Company of Dorris, were started during the summer of 1952 but only about 1/2 of the volume was removed during that season. Salvage is continuing in 1953 and it is expected that most of the windthrown volume will be removed this season. In the early summer of 1952 this windthrown material was heavily attacked by round-headed borers but during the first season most of their work was confined to the cambium region. During the current season the larvae have worked down into the sapwood and have caused serious damage in 6 to 8 inches of the outer sapwood. This has resulted in heavy cull in the smaller logs and moderate cull in the larger logs. An inspection of some of these logs was made as they were being sawed, and in the smaller logs practically all of the boards showed evidence of borer holes. In the larger logs most of the holes were cut out in the slab plus three 2-inch board cuts. The roundheaded borers causing the damage are principally larvae of the Oregon fir sawyer, Monochamus oregonensis Lec. This fact was established from rearings made by Ranger Abell in material caged at Mt. Hebron. It is suspected that other species of roundheads may be associated with the Oregon fir sawyer, but this has not been confirmed. No evidence was found of primary bark beetles breeding in

the material. The only bark beetle observed was a species of Pityokteines, probably elegans which is considered a secondary. None of the insects found to be working in the windthrown timber can be considered to constitute a hazard to the residual stand.

Recommendations

This problem serves to illustrate the need for haste in salvaging windthrown material. There is little that can be done now to alleviate the problem of loss in volume due to worm holes in this material. In any future salvage jobs involving windthrown or burned timber it is urged that every effort be made to remove and utilize all such material the first season following the blowdown or burn.

Inasmuch as this material still contains living larvae, it is recommended that so far as possible the lumber be processed for boxes and not utilized for construction timber. The larvae will continue to develop in the wood unless destroyed in the process of manufacture and are likely to create serious problems where the infested wood is used for subflooring, studding, or roof sheathing.

Forest Insect Laboratory
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